NOAA REPORT



October 1997 Vol. VI, No. 10

TV Weathercasters Come to DC: More than 100 television weathercasters representing stations from around the country came to Washington this month for a NOAA forum, where they heard from some of the nation's leading scientists on global climate change. As part of the forum, the weathercasters also heard comments from President Clinton and Vice President Gore at the White House.

"This forum will provide broadcast weathercasters with direct access to the scientists who have studied this issue for decades," said Commerce Secretary William M. Daley. "The Ad-

News Briefs

ministration recognizes the unique contribution that television weathercasters play in educating the public."

The conference began with briefings at NOAA's campus in Silver Spring, Md., by some of the nation's leading scientists on climate and climate change, including Dr. Daniel Albritton, director of NOAA's Aeronomy Laboratory; Thomas Karl, senior scientist at NOAA's National Climatic Data Center: Dr. Ants Leetmaa, director of NOAA's Climate Prediction Center; and Prof. William Easterling, professor at Pennsylvania State University's Geography and System Science Department.

Commerce Chiefs Confirmed: Earlier this month, the Senate confirmed two high-ranking Commerce officials. Taking over as Deputy Secretary of Com-

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Scientists from Federal and state agencies explored this coral reef in the Florida Keys National Marine Sanctuary in August.

'Spectacular' Reef Explored In Fla. Keys Marine Sanctuary

multi-agency team of scientists have become the first to **A** explore a little-known deepwater coral reef with spectacular coral cover during a reconnaissance survey in a remote area west of the Dry Tortugas islands between August 19 and 27.

Because of its location, the reef has been protected from the humancaused degredation that has affected other reefs in shallower waters of the Keys. It could serve as a control area for other Florida Keys reefs.

"The corals look like gigantic mushrooms gone wild," said Jim Bohnsack of the National Marine

Fisheries Service's Science Center in Miami. "The structural complexity of the reef made ideal fish habitat. When we first descended it appeared that there were hardly any fish present, but after a few minutes they began popping out of the reef everywhere."

Scientists from NOAA's Florida Keys National Marine Sanctuary, Southeast Fisheries Science Center, and the NOAA Corps were joined by scientists from the Biological Resources Division of the U.S. Geological Survey and the Florida Marine Research Institute of the

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It's Illegal, Too

Feeding Dolphins Makes Many a Moocher

he Marine Mammal Protection Act prohibits the "taking" of marine mammals. The term "take" means to harass, hunt, capture, kill or feed or attempt any of these activities. Unfortunately, many individuals have been engaging in such activities, especially feeding and harassing dolphins in Florida's Gulf of Mexico waters for many years.

When people offer dolphins food, they learn to beg for a living, lose their fear of humans, and do dangerous things like: swimming too close to boat propellers that can severely injure them; getting entangled with nets or swallowing baited hooks that can kill them; and eating foods like hot dogs, pretzels, and candy which can make them very ill.

According to Jeff Brown, a marine biologist at NMFS' Southeast Regional Office, "Dolphins can be very dangerous to people. Dozens of rammings and bites have been recorded and people have been seriously injured when dolphins pulled them under the water." He explained that wild dolphins often become aggressive when they are



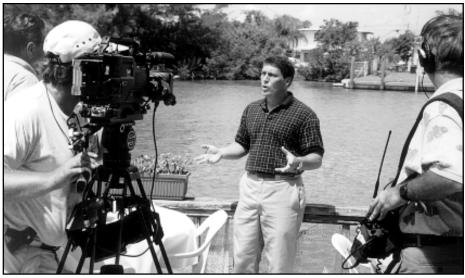
Moocher the dolphin demonstrated all of the classic begging behaviors typical of wild dolphins that have become accustomed to getting fed illegally by people.

angry, frustrated or afraid. "Dolphins that become career moochers can get pushy and threatening when people tease them or fail to give them the handouts they expect," said Brown.

"The penalties for violating the Marine Mammal Protection Act can be severe: up to \$20,000 and a year in jail," said Gino Freselli, a NMFS enforcement officer. "We've been working hard with our partners in

the Florida Marine Patrol to educate the public about the laws and issuing verbal and written warnings. However, we expect that more citations will be issued to people who blatantly or repeatedly break the law."

Trevor Spradlin, a marine mammal biologist with NMFS' Office of Protected Species, explained that everyone who lives in or visits Florida's coastal areas should now be fully aware of the law. "This spring, a four-member team conducted a campaign in key areas in Florida where interactions with wild dolphins are a concern. Our goal was to educate people about the dangers associated with dolphin feeding and "swim-with-wild-dolphin" enterprises. At each location we met with media, elected and law enforcement officials, educators and scientists to discuss our concerns," said Spradlin. "In addition to gaining considerable media coverage, we built partnerships with the operators of marinas, sporting goods stores, travel agencies



Jeff Brown, a marine biologist with NMFS Southeast Region, describes to a "REAL TV" crew how dangerous it is for people to feed dolphins.

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Number Seen Rising in Future

Third of Marine Species are Overfished: NMFS

reviewed by NMFS—almost one of three—are "overfished" or approaching an overfished condition, and more species are expected to be added to the list, fisheries service officials said in a report to Congress released this month.

According to the report, 96 species are overfished or nearing overfished, while another 183 species have not been overfished.

Data from the report will be used by the eight regional Fishery Management Councils as they prepare plans to end overfishing and begin to rebuild the depleted fisheries.

"Unfortunately, we expect the 'overfished' figures to increase as definitions in fishery management plans are amended to conform to the Magnuson-Stevens Fisheries Management and Conservation Act," said Terry D. Garcia, acting assistant secretary of Commerce for oceans

and atmosphere and deputy NOAA administrator. "However, we expect the eight regional councils responsible for managing these fisheries will begin to prepare rebuilding plans that will ultimately improve the stocks and provide more fish for consumers and recreational fishermen."

This year's analysis of fisheries stocks is considered to be understated and represents a minimum number of overfished fisheries. The 1998 and 1999 reports will use fishery specific definitions based on Congress's definition of "overfished" contained in the Magnuson-Stevens Act, and are expected to increase the number of fisheries considered overfished.

Currently, stock levels are evaluated by examining juvenile fish populations. Future assessments will use the new Magnuson-Stevens Act definition of overfishing that measures stock levels compared to the levels needed to ensure maximum sustainable yield for each species.

Based on the identifications made in the report, the councils are now required to develop programs to end overfishing and rebuild some 76 overfished species, and to prevent overfishing from occurring for the ten species that are approaching an overfished condition.

Rebuilding programs must be as short as possible, but not exceed ten years, except in cases where the stock's biology, environmental conditions, or international management measures dictate otherwise.

The full report is available on the Internet at http://kingfish.ssp.nmfs.gov/sfa.



Mural, mural on the wall: NESDIS satellite controller Andrew Fitzgerald painted this mural, now on display at the Satellite Operations Control Center in Suitland, Md.

Satellite Controller Paints Space Mural

ndrew Fitzgerald, a satellite controller with NESDIS in Suitland, Md., displays a mural he painted. The mural depicts the Earth as seen from space, and environmental satellites in orbit above the Earth. Fitzgerald painted the mural on two four-by-eight pieces of plywood in his living room. He then transported the sections to Federal Building 4 in Suitland, and arranged to have the mural mounted outside of the Satellite Operations Control Center.

Fitzgerald came to NOAA from the Defense Department, where he served as a satellite controller at Offutt Air Force Base, Nebraska. He lives in Bowie, Md.

—Gordon Helm ⊗

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Focus On...

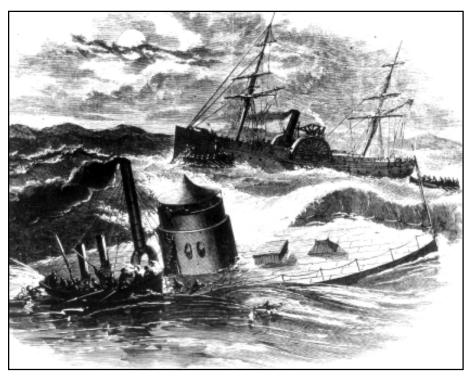
25th Anniversary of NOAA's Sanctuaries and Reserves

wenty-five years ago the nation got its "Acts" together and transformed protection of oceans and coasts. With the passage of two important pieces of legislation—the Marine, Protection, Research and Sanctuaries and the Coastal Zone Management Act of 1972—stronger protections and a more aggressive stewardship developed under the newly created National Oceanic and Atmospheric Administration.

The National Marine Sanctuary and National Estuarine Research Reserve programs signaled a new approach to natural resource management. Together they balance recreational and commercial uses of oceans and coastlines with long-term protection of their natural and cultural bounty. This new national network of marine sanctuaries and estuarine reserves would achieve this delicate balance by working with state partners and local citizens, and by joining forces within the federal government to serve our Nation's waters and its inhabitants.

18,000 PROTECTED SQUARE MILES

Over the past three decades, National Marine Sanctuaries have expanded the parameters of ocean protection from the one-square mile *Monitor* National Marine Sanctuary to over 18,000 square miles of ocean and coastal waters, from the North Atlantic to the South Pacific. Closer



This illustration from the January 1863 issue of Harper's Weekly, shows the USS Monitor foundering in a gale off Cape Hatteras, North Carolina over Christmas 1862. The site of the wreck would later become the Monitor National Marine Sanctuary.

to shore, National Estuarine Research Reserves now protects nearly 440,000 acres across a wide range of coastal and estuarine habitats in the United States and Puerto Rico.

NOAA's sanctuaries and reserves are places where the agency's many different services and skills can come together to solve problems and benefit citizens.

Sanctuaries act as advocates for conserving our cultural and natural heritage, from shipwrecks to humpback whales. They aid in the successful recovery of endangered marine mammals and lessen the threat of oil spills and ship groundings. They increase our knowledge of the ocean through research, inspire our children through education, and benefit coastal economies dependent on healthy oceans. Through advisory boards, the sanctuaries have helped to focus the talents of local government and business leaders, tribal authorities, teachers, schoolchildren, and concerned citizens on meeting the challenges facing our oceans.

Reserves also act as advocates for vulnerable coastline, taking advantage of a unique state and Federal October 1997 / NOAA Report 5

partnership. Estuarine reserves monitor and protect species and habitat, study pollution control, promote community involvement, and work closely with federal, state, and local agencies and international organizations. A major part of their mission requires the collection, analysis and dissemination of coastal zone management information and research results.

NOAA WORKING TOGETHER

Each of these services is enhanced when NOAA's sibling programs work together. In collaboration with the NOAA Corps, the programs enable scientists, teachers, and students to pursue important research. The weather service's expertise with the causes and effects of El Niño contributes to sanctuary and reserve programs and planning. The fisheries service's enforcement program uses a skillful approach, combining education with enforcement within sanctuary boundaries. NESDIS satellite photography, the undersea research program, Sea Grant, and the restoration center are just a few of the many, many other NOAA programs that contribute to the success of sanctuaries and reserves.

Throughout the years, marine sanctuaries and reserves have attracted an ever-widening community of citizens whose lives are enriched by the coasts and oceans. This growing body of fishers, surfers, boaters, and others discovers that to

know a marine sanctuary or estuarine reserve is to care for it. And in turn, they show their appreciation by joining NOAA in preserving and protecting these areas.

Sanctuary and Reserve director Stephanie Thornton, in promoting an ever-larger coalition of marine and estuarine supporters, explores the program's direction and mission in the 21st century. "It requires a hard look at what it will take in the next 25 years to achieve our vision of fostering ecosystem management, protecting resources while considering human needs, and employing sound scientific principles in decision making and research."

In celebrating the 25th anniversary of NOAA's Sanctuary and Reserve

Division, we use this milestone to reflect on the program's many contributions and to explore our future direction. The Sanctuary and Reserve Division joins in helping to fulfill NOAA's mission of environmental stewardship, whether by giving local citizens ways to participate, reducing the likelihood of oil spills, improving understanding of the ocean and coastlines, restoring habitats and protecting threatened species, or taking the lead in global management of marine and coastal protected areas.

As we celebrate in the beauty and wealth of the oceans and coasts in this anniversary year, we rededicate ourselves to continue protecting them for future generations.

—Nancy O'Donnell ⊗





Sunrise over the South Slough National Estuarine Research Reserve, near Coos Bay, Oregon.

CFC: Helping In Your Community

This year's Combined Federal Campaign has begun, and key workers will be contacting NOAA employees for a few minutes of their time to provide information about the Campaign. The theme this year is "It All Comes Back To You."

A colorful catalogue, which describes each charity, will help you choose as many charities as you would like to support. Your participation is important. NOAA's Hotline for CFC questions is 301-713-2262.

The CFC, initiated by President John F. Kennedy in 1961, fosters a tradition of commitment to the community through the selfless efforts of Federal employees. It is a unique way for us to help those in need across our community and throughout the world. It is also the only authorized solicitation of employees in the Federal workplace on behalf of charities.

NOAA Administrator D. James Baker is convinced that the CFC provides all Federal employees a valuable, organized opportunity to support the charitable organizations of their choice. NOAA employees have demonstrated their concern and support for the many causes represented by CFC charities over the years. This year, over 2,500 organizations are participating.

The Department of Commerce effort to raise \$2.25 million is being led by Secretary Daley. NOAA's share is \$455,000, which would be exceeded if every NOAA employee committed to donate only \$128about 36 cents per day—to their favorite charities.

Again this year, Eagle and Double Eagle awards will be made to individuals contributing one or two

percent of their annual salaries. More than 225 NOAA employees made this commitment last year. You may also donate to the CFC anony-



mously by placing confidential gifts in sealed envelopes, opened only at CFC Headquarters. Every contribution, no matter what size, will be appreciated. Payroll deduction makes it easy for you to help all year long.

Contributions today can mean tomorrow's meals for hungry children, relief for families in need of counseling, further work on cures for

diseases, comfort for the dying, access to water in the Third World, environmental protection, and better lives and renewed hope for millions of people in our global community.

This year's director of NOAA's Combined Federal Campaign is James H. Czerwonky of the National Marine Fisheries Service. He leads a first-class

team of executives, coordinators, team captains, and key workers from throughout NOAA to provide more than 3,500 NOAA headquarters employees the opportunity to help local, National, and world-wide charitable organizations.

Dolphins: Don't Feed the Little Beggars

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and others who agreed to display our posters and distribute our brochures."

NMFS's Dolphin Protection campaign got a major boost in September when the television program "Real TV" broadcasted a segment about the dangers of dolphin feeding. On August 6, a Real TV crew met Brown, Freselli and Officer Terry Noll of the Florida Marine Patrol (FMP) in Nokomis, Fla. to film the piece. During interviews on shore, Brown and Freselli described dolphin biology and behavior and explained why feeding dolphins is dangerous to the dolphins, potentially dangerous to people and illegal.

After those interviews were completed, everyone got underway on an FMP boat for a "dolphin encounter." As expected, Moocher, one of the now famous Nokomis dolphins, appeared shortly after the boat left the dock and came through by demonstrating all of the classic begging behaviors typical of wild dolphins that have become accustomed to getting fed illegally by people. The film crew captured it all, including some great shots of the dolphin's gaping, tooth-filled mouth as Brown described all those behaviors in detail, emphasizing the associated health and behavioral consequences dolphins suffer as well as the potential dangers to humans.

"This story is very important and is sure to have widespread appeal," said John Pauly, the producer who oversaw the filming. "This piece is set to be included in one of the first shows of the new fall season."



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NOAA, University Labs to **Share Ship Resources**

TOAA and the University National Oceanographic Laboratory System (UNOLS) have entered into a I formal agreement—the first of its kind involving a NOAA ship—to mutually schedule use of oceanographic ships in the conduct of scientific research.

The agreement, which in NOAA primarily affects OAR, will make the agency's new state-of-the-art oceanographic research ship, the Ronald H. Brown, more available to university scientists, while providing greater opportunity for NOAA scientists to use university ships. The agreement will also improve the overall efficiency of the research community and the cost effectiveness of ship operations by having greater flexibility in scheduling ship time and utilizing vessel assets.

"This Memorandum of Agreement represents a significant step toward a more meaningful partnership between the federal and academic oceanographic communities," said NOAA Administrator Dr. D. James Baker. "We are already off and running in coordinating the Brown's scheduling, and are looking forward to working with UNOLS to make maximum use of our joint resources. The Brown, with its capability to collect both oceanographic and meteorological data, will provide a unique contribution to the research community, from which we should all profit."

The agreement will serve as a model for future NOAA-UNOLS partnerships in the areas of fisheries-related research, coastal research and monitoring, operational oceanography, and satellite calibration.

UNOLS is a consortium of 57 academic institutions with significant marine science programs that operate 27 ships.

—Jeanne Kouhestani ⊗



Sealing their agreement with a handshake, NOAA Administrator Dr. D. James Baker and UNOLS Council Chairman Ken Johnson from Moss Landing Marine Laboratory in Southern California sign an agreement to share ship resources.

Little-Known Coral Reef Explored In Florida Keys Marine Sanctuary

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Florida Department of Environmental Protection in a multi-agency effort sponsored by the Biological Resources Division of the Department of Interior's U.S. Geological Survey. Operating from the M/V Tiberon out of Key West, the team was surprised by the reef's size and the fact that it was densely covered with coral.

"The reef was unexpected because of its location in the Gulf of Mexico and considering that it lies 60 to 100 feet below the surface," said Bohnsack.

The reef may have been overlooked in the past because it appears to be relatively flat on depth sounders and is too deep to be seen from the surface. The reef was previously known to only a handful of divers as "Sherwood Forest" because during early morning dives the corals are mysterious looking and reminiscent of a forest canopy. Low light conditions at these depths causes corals to grow in a unique flat plate-like form. The reef profile is remarkably

uniform, which at first gives a false impression of a flat bottom that is, in fact, five feet above the real bottom. The subsurface of the reef is a maze of valleys and intricate caves and tunnels between corals.

"We were only able to conduct a preliminary survey of the site because its depth, remoteness, and the fact that the upper 50 feet of the water column was filled with high densities of stinging jellyfish. Several divers suffered from painful stings," said Bohnsack. "We speculate that the reef is very old and exists only because of the unique local conditions. Normally clear water allows sufficient light for coral growth and the depth of the reef apparently protects it from storms and extreme hot summer or cold winter surface waters in the Gulf of Mexico."

The discovery was made as the scientists were mapping and collecting data on coral, sponge, and fish populations from many sites in the Dry Tortugas National Park and the western Keys Sanctuary.

-Chris Smith 🔗



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merce will be Robert L. Mallett. Mallett had served as City Administrator and Deputy Mayor for Operations for the District of Columbia under former Mayor Sharon Pratt Kelly, and as Legal Counsel for Senator Lloyd Bentsen when Sen. Bentsen chaired the Senate Finance Committee.

The Senate also confirmed W. Scott Gould to be the Department's Chief Financial Officer and Assistant Secretary for Administration. He served previously at the Treasury Department as Deputy Assistant Secretary for Departmental Finance and Management. Earlier, he worked as a White House Fellow, and was appointed by the Governor of Massachusetts to assist in the State-led financial restructuring of the city of Chelsea. Gould also served as an ac-



tive duty officer in the United States Navy for eight years.

Scientists Develop New Map of the World's Sea Floors: Two NOAA and university scientists have used gravity data from satellites in addition to depth soundings from ships to produce a more defined, high-resolution map of the worlds ocean floors.

The new map, which looks similar to one the scientists published in 1995, provides estimations of the ocean depths from gravity data from satellites. The 1995 map was based on gravity data, but did not provide estimations of ocean depths.

Scientists Walter H.F. Smith of NOAA's National Oceanographic Data Center and David T. Sandwell of the Scripps Institution of Oceanography, University of California, San Diego, reported on their project in the September 26 issue of *Science* magazine.



At the press conference introducing the Ocean Act of 1997 were Sen. John Kerry (D-Mass.), Sen. Ernest Hollings (D-S.C.), NOAA administrator Dr. D. James Baker, Rep. Sam Farr (D-CA), Rep. Jim Saxton (D-NJ), and Sen. Olympia Snowe (R-Maine).

Act on Ocean, Coastal Policy Introduced

he Oceans Act of 1997 was introduced last month at a press conference on Capitol Hill.

The act sets up a Commission on Ocean Policy (similar to the Stratton Commission, which recommended the creation of NOAA) and a National Ocean Council.

The Council's job would be to serve as the forum for developing an ocean and coastal policy and oversee the implementation of those policies to improve agency coordination and cooperation.

The Commission would report to the President and the Congress on a comprehensive national ocean and

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coastal policy by reviewing and suggesting changes to current laws and regulations. It would also, assess current and planned facilities and equipment, and evaluate relationship between Federal, state and local governments and private sector in ocean activities.

—Matt Stout ⊗



NOAA Report is a monthly publication for NOAA employees from the Office of Public Affairs, Washington.

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